

(No Model.)

H. WYMAN & G. POOLE.
PILE FABRIC LOOM.

No. 529,151.

Patented Nov. 13, 1894.

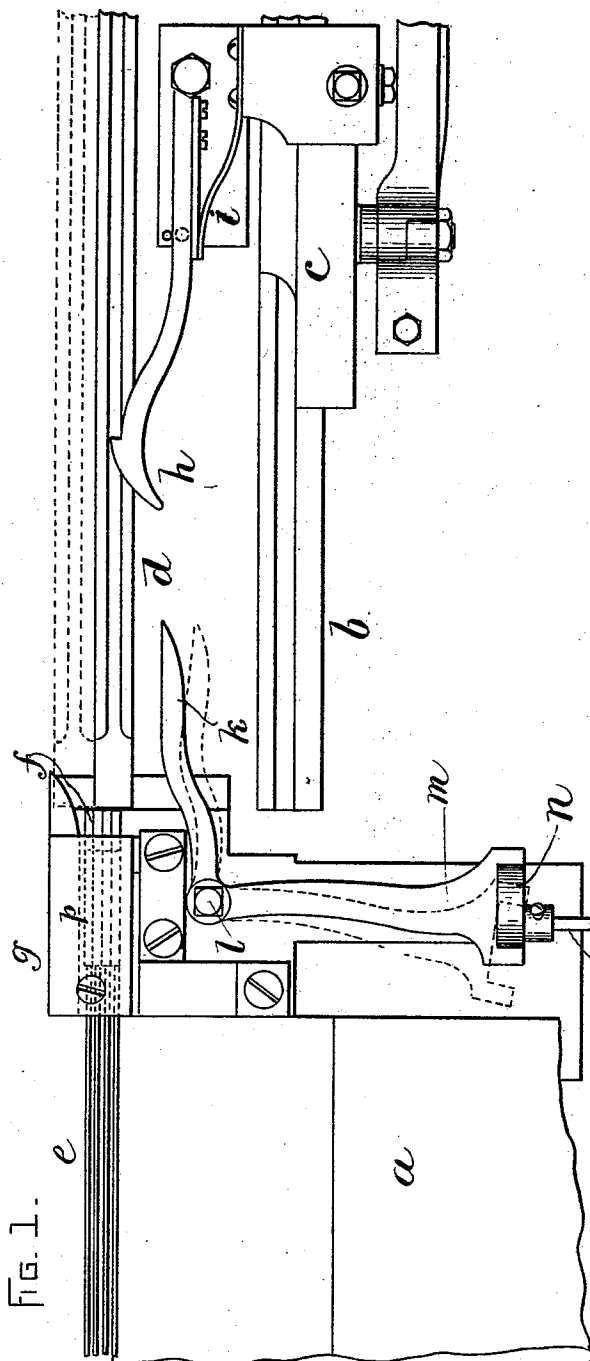


FIG. 1.

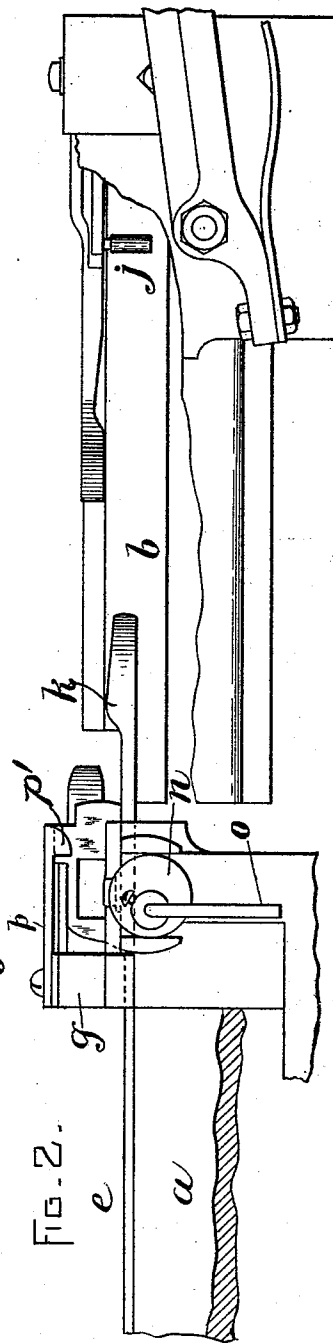


FIG. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

HORACE WYMAN, OF WORCESTER, AND GEORGE POOLE, OF LOWELL,
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PILE-FABRIC LOOM.

SPECIFICATION forming part of Letters Patent No. 529,151, dated November 13, 1894.

Application filed September 2, 1892. Serial No. 444,893. (No model.)

To all whom it may concern:

Be it known that we, HORACE WYMAN, of Worcester, in the county of Worcester, and GEORGE POOLE, of Lowell, in the county of Middlesex, State of Massachusetts, have invented certain new and useful Improvements in Pile-Fabric Looms, of which the following is a specification.

This invention has relation to pile weaving looms for the production of plushes, velvets, Brussels carpets, fustians, &c.

It is the object of the invention to provide improved means for switching or throwing the wire withdrawing hook or latch out of action so that whenever the operative may desire, it may be made to skip and fail to withdraw a wire, and thus, under certain circumstances avoid pulling the pile threads through the reed and harness, and other disastrous consequences.

To these ends the invention consists of the improvements hereinafter fully described and claimed.

Reference is to be had to the annexed drawings and to the letters marked thereon, forming a part of this specification, similar letters designating similar parts or features, as the case may be, wherever they occur.

Of the drawings—Figure 1 is a plan view of so much of the wire motion as it is necessary to show in order to explain my invention. Fig. 2 is a front view of the parts shown in Fig. 1, portions being shown in section and as broken away to more clearly bring to view essential parts of the invention.

In the drawings *a* designates the loom frame, which so far as this specification goes may be taken to include the stationary supporting parts of the machine. *b* is the slide rail upon which the carriage *c* of the wire motion moves. *d* designates the wire-bar and *e* the wires, provided with the usual or suitable heads *f*.

g designates the wire-box or magazine in which the wire heads are received and held when the wires are woven into the fabric to form the loops for the pile.

The carriage *c* is provided with the usual wire withdrawing hook or latch *h* which engages the wire heads by means of perforations in their sides and withdraws the same from

the wire box so that they can be drawn back and shot forward in the usual manner. The hook *h* is pressed normally in toward the wire box by a spring *i* bearing thereagainst, as shown in Fig. 1, and is provided on its under side with a downwardly extending pin *j*, as shown in Fig. 2.

k designates a switch lever pivoted at *l* opposite the wire-box, and provided with a forwardly extending arm *m*, the end of which is bifurcated, and in which bifurcation an eccentric *n*, provided with a crank or pin *o* is adapted to be operated, so that by turning the said eccentric, the switch lever may be moved to the dotted line position of Fig. 1, and into the path of travel of the wire withdrawing hook, or back to the full line position, and out of line of movement of said hook.

In the operation of weaving when it is desired to have the wire withdrawing hook skip a wire, the attendant may take hold of the pin or crank *o* and turn the eccentric *n* so as to bring the switch lever into the dotted line position, Fig. 1, in which position it will be engaged by the pin *j* and move the hook so as to hold it back from engaging the wire-head, as before explained.

The location of the eccentric and means provided for operating it are such as to permit it to be moved quickly when necessary.

The cover or top *p* of the wire box or magazine is constructed as a spring, which bears upon the wire heads in the box and tends to maintain them and the wires in vertical position and cause them, as a consequence to operate with better effect than they otherwise would. This cover or spring cap *p* is provided with depending ears, *p'* (see Fig. 2), in order to prevent the wires from tipping over, the heads of the wires resting against each other or against these ears.

It is obvious that changes may be made in the form and arrangement of many of the parts comprising the improvements without departing from the nature or spirit of the invention.

Having thus explained the nature of the invention and described a way of making and using the same, though without attempting to set forth all of the forms of its construction

or all of its modes of use, it is declared that what is claimed is—

1. A wire motion for looms comprising in its construction a movable wire-withdrawing
5 hook provided with a pin or projection, a switch lever, and means including an eccentric for throwing the end of said lever into and out of the path of movement of said pin or projection, substantially as and for the purpose described.
- 10 2. A wire-motion for looms comprising in its construction, a movable wire-withdrawing hook provided with a pin or projection, a mov-

able switch lever adapted to be moved into and out of the path of movement of said pin or projection, and an arm connected with said switch lever for moving the same, as set forth. 15

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 19th day of 20 July, A. D. 1892.

HORACE WYMAN,
GEORGE POOLE.

Witnesses:

JUSTIN A. WARE,
JOHN B. SYME.